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WEIGHT REDUCTION IN GROUPS

Description of a Three-year Study at Herrick Memorial Hospital, Berkeley

WILLIAM D. SIMMONS, B.A., M.P.H.,
Administrator, Department of Research, Herrick Memorial Hospital

Some 300 years ago, Shakespeare had one of his characters state: "Leave gourmandizing. Know the grave does gape for thee thrice wider than for other men." Yet it is only recently that we have begun to see statistical confirmation of the mortal effect of overeating, assurance that "the longer the belt line the shorter the life line." The more than coincidental relationship between over-

weight and disease is apparent enough to consider reducing or, even more importantly, preventing overweight, as part of the foundation of public health programs for the reduction of morbidity and mortality from, for example, diabetes and cardiovascular-renal disease.¹

Perhaps less apparent, but no less important, is the psychological handicap of excess weight, an imposition of



Herrick Hospital staff, left to right, William D. Simmons, Administrator, Department of Research; Alfred E. Maffly, Hospital Administrator, and Mrs. Sylvia Mitchell, chief dietitian, confer on weight reduction program with Lester Breslow, M.D., Chief, Bureau of Chronic Diseases, California State Department of Public Health.

our modern culture which worships youth and beauty and equates both attributes with slenderness. Yet this culture with its lavish dietary and potent advertising is helping to increase the extent of overweight to a point where (with recent estimates of one in every four of our population overweight) this indeed has become today's number one problem in preventive medicine.²

THE PROBLEM OF OVERWEIGHT

The treatment of obesity and the relationship between overweight and chronic diseases are subjects of constantly increasing evaluation in medical literature. The newspaper and popular magazine reader is treated to a wide range of material dealing with weight control, from the insurance companies' careful focus on the problem to the now-slim housewife's chatty piece on "how she did it." The unhealthy prevalence of overweight noted in published analyses of clinic patients and insurance applicants has directed the attention of professionals in public health to the preventive aspect of obesity.

To the individual who is overweight all this betokens long-awaited help with a problem, to him usually chronically, but at intervals acutely, disturbing. A few minutes of conversation with any group of overweight people will reveal that most of them hate "being fat," have tried at times, with varying degrees of success, "to do something about it," pretty generally are familiar with the recommended therapy, but still find losing weight and maintaining the loss a job of discouraging proportions.

The etiology of obesity has been variously described as hereditary, familial, environmental, endocrine, pathologic and psychologic. Many investigators consider obesity to be due to habitual overeating which is a symptom of emotional disturbance. This may be so. It would seem, however, that in a significant number, the obesity, whether psychological factors exist or not, is a product of any one, or a combination of such other factors as geography, familial eating habits, cultural folkways, economic situation, or ignorance of good dietary practice. Whatever its cause, the overweight person is the victim of an eating habit, frequently long established,

Do You Like Our New Format?

Note that the system of dating has been changed too. The two issues each month will be dated the 1st and the 15th. Under the old system this issue would be dated June 30th. Librarians can get extra copies from us if they wish to include this issue in both Volume 11 and 12.

which for permanent success in weight control must be changed. But what motivates people to change a habit—especially one so pleasurable and meaningful as eating? Most overweight people, despite Shakespeare's admonition, will cross their fingers, go on eating, and wish, again with the astute observer of human foibles, "that this too solid flesh might melt; thaw and resolve itself into a dew"—for such is their plaintive answer to the demand for effort and denial.

Meanwhile, the physician, faced in his practice with a patient for whom weight reduction is a desirable procedure, carries the patient along, alternately back-patting and knuckle-rapping over the details of some diet. Too often the lonely struggle against appetite proves too difficult and the patient, after successful weight loss, in time gains it all back; or, without a "magic formula," never succeeds in combat with appetite and remains the despair of the conscientious practitioner.

Recently there has been widespread interest in weight reduction programs which include some therapeutic group activity. Reports on some of these projects in the literature have been encouraging, although there is a lack of controlled studies and of comparative data. In discussion, differentiation should be made between "group psychotherapy" which is a particular dynamic therapy situation used in psychiatric clinics, and "group participation," a salutary experience of recognition, acceptance, support and competition. This process promises action by providing a special new social grouping within which habit change is not only sanctioned but encouraged for each participant by group decision.

The importance of overweight, both for its prevalence and its dubious physical and mental health connec-

tions, the unrewarding treatment by dietary advice alone, and the promise which these group approaches might hold, led to the establishment of a study of such methods in weight reduction.

The Study at Herrick Hospital

The chief aim of the research started at Herrick Hospital in Berkeley, California, in July, 1950, is to investigate the idea of using a group approach to the problem of losing weight.

Herrick Hospital, a 200-bed private hospital, was chosen because of its interest in a wide range of community service programs and the particular interest and background of its medical department chief, individual overweight and the frequently related chronic illnesses. Funds for the project were made available through the Bureau of Chronic Diseases, California State Department of Public Health. Staff of the Nutrition Service of the state health department conducted individual interviews with participants and assisted in planning for the diet. The lively interest in problems of group activity among the staff of the state health department, the university faculty, and other local agencies, provided an especially resourceful community in which to carry out this investigation.

In order to conduct the study the hospital created a Department of Research directed by the Chief of the Department of Medicine, Dr. H. L. Harvey, and administered by a public health administrator (the author added to the staff of the hospital). Planning has been a joint responsibility carried out with assistance from individuals who have acted as group leaders and consultants.

This study has now been conducted for three years. The present report will attempt to indicate what has been learned in that period about the group approach to the control of overweight.

In the first year of the study, which was exploratory, many factors which seem to be important in the success failure of group activity directed toward weight reduction were identified. The results of the experiments were considered encouraging enough to warrant further trial and to suggest that the group method is effective. Much that was learned in the

it was utilized in planning succeeding studies and striking improvements have been noted.³

If we consider the important components of "Operation Overweight" to be (1) the Participants; (2) the Group; (3) the Leader; (4) the Meetings; and (5) the Results, perhaps we can discuss under these headings the procedures which have been used in the Herrick Hospital.

The Participants

To determine the effectiveness of group approach to the problem of weight reduction, we recruited 100 overweight but otherwise healthy individuals in each of the past three years. This was done primarily through community interest generated by a newspaper item. Other referrals were from private physicians, clinics, and public health nurses. Application blanks were sent to all who inquired. The doctor named on the application was contacted in each instance for permission to enroll his patient.

Each applicant was individually oriented to the idea of the group, to various testing procedures, and to the necessity for attendance and availability for follow-up.

If the applicant still volunteered to participate, she was scheduled for assessment procedures: (1) a complete physical examination and battery of laboratory tests by which it was decided acceptable physical health had been established a base line from which subsequent measurements could be made; * (2) a nutrition interview from which an attempt was made to learn something about the predominant food habits, patterns, and attitudes of this group; and (3) a battery of psychological tests as another way to measure change and to learn whether such tests might be useful as a screening device. These procedures were repeated at the end of the observation period to provide comparative data. Several papers on these tests are expected to be published soon.⁴

Last year, and in the current project, the physical examination was not done. Instead, each individual was responsible for securing his own physician's approval of participation. A self-administered health questionnaire was used, however, to get information from each subject on history and family history of overweight and selected diseases.

The Group

Following these research procedures, each individual was assigned to a group. After experimenting with groups, which varied from 8 to 28 members, we finally have settled on about 12 as being big enough to provide the group with resources, yet small enough so everyone can participate. With the expected drop-outs and weekly absenteeism the groups generally stabilize to a good size.

Experience in the first year suggested the importance of homogeneous groups, so since that time all participants have been women, assigned to groups on the basis of age range above and below 40.

Attempts to get even a sufficient number of men to balance a group or set up a group of men exclusively have been thwarted by swing-shift schedules, evening activities, etc. Perhaps also there are differences in motivation to weight loss between men and women which call for different approaches.

Scheduling of both afternoon and evening groups introduced a further element of homogeneity in that homemakers and mothers tend to be able to come in the daytime, working women at night. Some general grouping by degree of overweight may have certain advantages because of the feeling, frequently expressed by heavier members, of what is fancied to be lack of sympathy and understanding on the part of women with less of a weight problem.

The first time we tried working with groups the number of meetings varied among the groups from 13 to 27. Lately 16 meetings have been held, once a week for all groups. This is an arbitrary figure corresponding only with the number of meetings usually held for some similar kinds of groups. We begin to feel now that many people with a long-term reducing program ahead of them need support and guidance for a much longer period.

Each meeting of the group usually lasts about an hour and a half.

The Leader

Leadership for the groups has been sought from among those disciplines apt to include experience or interest in group work techniques and with pertinent background. Leaders have

included nutritionists, health educators, public health nurses, social workers, home economists, a psychologist, an adult educator and an internist. Frequently the leader acts only as a catalyst helping the group to move forward toward its own goals, and his main qualifications seem to be interest, sympathy, willingness to listen, and skill in dealing with people. This is not to say, however, that technical knowledge of food and group work experience is not a boon to a potential leader.

In groups where the leader has not been able to supply specific dietary or medical information, we have used consultants. The question that comes up here, of course, is about the timing in a learning experience. We learn if the answer is provided when the question comes up.

Leaders have been responsible for the content and structuring of their own group meetings and for defining their role with the group. In addition, for research purposes, they keep an attendance record, weekly weight check, administer post-meeting reaction questionnaires, and report on several aspects of each of their meetings with the group.

The Meetings

About the environment for meetings—the main requirement seems to be for comfortable privacy. Some of our groups have served coffee. Since ours is a research project, we have made no charge for tests, meetings, or even coffee. A token charge for "the course" might be a useful technique to keep attendance at a high level, even if not enough to help much with the costs of a community service program.

Each individual is given the same diet (1,000 calories, with 80 grams of protein, 80 of carbohydrate, and 40 of fat). Much discussion develops in all groups about various features of the diet. Such discussion seems to monopolize the meetings sporadically: in the beginning when the group members are strange to one another and diet is a "safe" topic, at times when they begin to reach a plateau in reduction, and at times when resisting a leader's attempts to get them to "introspect" about their overeating.

Diet and dieting experience, food habits, reasons for overeating, rea-

sons for wanting (or not wanting) to lose weight, menu preparation, low calorie recipes are frequent content areas; other topics, again depending upon the leadership, run the gamut of human experience and, by relative amounts of discussion times, are probably more important to group members than are diet topics.

It is interesting to note that all groups eventually cover the same discussion topics.⁵ Only the order in which they occur differs from group to group, depending somewhat on the interests and background of the leader. To date we have not found among the groups any significant difference in the weight loss results which can be related to the leader's professional discipline. Generally speaking, however, skill in working with groups of people counts for more than the informational background, but as has been suggested already, the combination is probably the best qualification for leadership in working with weight reduction groups.

Some of the groups have a comparatively structured experience, others a very permissive one. This also varies in any group from time to time—some meetings being devoted largely to information-giving, problem discussion, etc., other meetings used mainly for personal revelation, and small talk. Of course, this depends to a great extent on how comfortable a leader feels in a particular group situation. All groups have a weekly weight check by the leader, by an elected group member, or self-recorded. Some groups employ "gimmicks" of various sorts (e.g., expected weight loss graphs, gold star race, high loser pool, piggy bank). Some groups get each member to set a weight loss goal at the end of each meeting for attainment before the next meeting. Such competitive devices, even though developed by the group members themselves, usually lose some of their appeal before too long, to be replaced by solicitude and reassurance for less successful members.

The Results

In attempting to learn about the methods of working with groups of overweight individuals, we have now observed some 300 subjects in 24 dif-

ferent groups.* In tabulating weight change and attendance information, we have dropped those records not considered reliable for a variety of reasons which affect the weight (e.g., pregnancy during the period of observation, cast put on leg, illness with weight loss, etc.).

In a total of 29 participants, 250 lost weight, 152 of them losing more than 10 pounds and 66 of these losing more than 20 pounds (range 20-52 pounds).⁶ Our rule of thumb for achievement of weight loss is based upon two pounds a week, or about 30 pounds loss possible during the observation period for most participants. Of those who did not lose weight, 13 stayed the same, and 18 gained an average of three pounds.

These figures, from the records of three years, do not give a correct impression of what we are attempting to measure here. Since we had set out to observe the effect of group activity, much effort has gone into planning so that this activity might become increasingly effective. Perhaps a comparison between the results in the first and second year is actually more revealing.

In the first year 57 participants of the original 107 attended at least half the meetings held for their respective groups. Forty-one participants lost 10 or more pounds; of these 20 lost 20 or more pounds. The maximum individual weight loss was 43 pounds. Five neither lost nor gained; 17 gained; 17 gained one to eight pounds and one gained more than 10 pounds. The total weight lost was 901 pounds.

Of the original 109 in the second study, there were 89 who attended at least half of the meetings of their groups. Seventy-eight lost 10 or more pounds; of these 46 lost 20 or more pounds. Maximum individual weight loss was 51 pounds. Only one did not lose weight, none gained. The total weight lost was 1,746 pounds. It can be seen that attempts to improve the group experience apparently resulted in about double the amount of weight loss.

The correlation between weight loss and attendance at meetings is most strikingly shown in the fact that of the 152 individuals who lost more

than 10 pounds, 111 of them attended more than 75 percent of the meetings held for the groups to which they were assigned (24 groups held an average of 16 meetings each). This is perhaps to be expected, since it is likely that both adherence to a weight reduction diet and willingness to attend meetings regularly reflect the degree of individual motivation. On the other hand, most of these people (92 percent) state that they had tried many times, unsuccessfully, to lose weight. Therefore it is believed that participation in groups will be found to be of significance when this factor is tested in the current study.

Since the investigation includes the applicability of the methods studied to community projects, the conclusion that these are successful is not warranted until adequate follow-up demonstrates significant achievement and maintenance of weight loss.

Follow-up

The third annual follow-up is just beginning.

On the basis of information from previous follow-up reports, and in the absence of completed analyses of the total figures, the participants have a disappointing record since leaving the group. Many have started to regain weight lost during the period of group observation. A few have held the line but have not continued the loss, still needed to bring them down to ideal weight. Another group has made consistent and remarkable inroads upon its weight problem. This group comprises roughly 25 percent of an original population of 200 (i.e., those who have been "on their own" for a year or more). Follow-up records were more easily obtained from participants whose attendance was good during the project. It was virtually impossible to obtain information from those whose attendance had been poor.

An interesting aspect of this follow-up is the evaluation of the experience by the group members "looking back." In spite of the disappointing weight record, there is almost unanimous agreement that the groups were specifically helpful to their members. "I have never done this well before," "I feel I know how to help myself now," "I have been more aware of my eating habits," are typical comments.

* The study currently in progress will add 150 subjects to our series and six more groups. This study has a somewhat different objective than previous studies and is as yet incomplete.

Summary and Conclusions

The primary objective of this study has been achieved in that some 300 overweight individuals have been observed over a period of time in an attempt to evaluate their response to group activity specifically designed to help them adhere to the limitations of a weight reduction diet. In such studies as this, purely objective findings are necessarily few, but impressions are many. Both deserve discussion.

A review of some of the large amount of information accumulated in the project suggests that:

1. The application of group methods to the problem of weight reduction is effective in promoting adherence to a diet so that satisfactory weight loss takes place for most participants in a group.

The importance of this is not alone in the saving of staff time needed to provide accurate information. The group method also offers a sympathetic setting in which patients can be urged to talk and are given time to do so. Our observations thus far suggest that some of the elements in a group situation which are factors in success are recognition and acceptance by a group, the wholesome effect of group discussion, the persuasiveness of group decisions, the reassurance, support, and competition which each individual feels from his identification with a group of people having the same problem and doing something about it.

The influence of the leader's professional background probably accounts for differences in emphasis or timing but the same discussion subparts recur in each group. Several professions seem able to contribute useful group discussions, but our observations, although inconclusive, indicate the relatively greater importance of skill in handling people as compared with dietary specialization. The most effective job will be done by the leader whose professional training and experience includes both.

2. Evidence from the histories of dieting, as well as discussion with participants, both those who lost significant amounts of weight and those who did not, tends to support the impression that group experience helped more than anything which had

been offered in their previous attempts to lose weight. That is, more weight was lost in a comparable dieting period, weight maintenance is easier, or morale and outlook were better during this weight reduction attempt.

On the other hand, we are faced with the necessity for improving the group approach to help more people with the problem of maintaining their weight after reducing. A longer period of support in the group environment—an almost universal request—would very likely help.

However, since few of the available health resources in a community can provide such long-continued help it becomes evident that programs for the prevention of overweight are far more important than programs for reducing overweight individuals.

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Health Officer Changes

City of Red Bluff

Donald E. Thompson, M.D., has been appointed to succeed Charles E. Milford, M.D.

Tulare County

Donald F. Williams, M.D., formerly health officer for Kings County during the absence on military leave of Donald E. Upp, M.D., has been appointed Tulare County Health Officer. G. Wayne Powell, M.D., formerly Tulare County Health Officer and now on military leave, has decided to remain in military service.

Bathing Beaches Checked For Contamination

Because of the large number of people who use California's beaches, the State Department of Public Health for many years has maintained surveillance of beaches to guard the public against health hazards which might be created by sewage contamination. From time to time local health officers have found it necessary to post warnings when sewer outfalls break or when sewage overflows occur.

The Bureau of Sanitary Engineering is continuing the department program of surveying and sampling the quality of recreational surf waters. As was done last year, every bathing beach from San Francisco to the Mexican border that is located near an ocean discharge of sewage effluent will be inspected and a laboratory test run on the waters. Staff from the Division of Laboratories, using a mobile laboratory, make the bacteriological tests.

These surveys are made in cooperation with local health departments and the agencies in charge of the sewerage systems and disposal works.

The effect of discharge of sewage effluent to the ocean is now being studied at Imperial Beach and the Carlsbad-Oceanside area in San Diego County, White's Point and Santa Monica Bay beaches in Los Angeles County, the Oxnard-Hueneme area in Ventura County, Avila in San Luis Obispo County, Monterey Bay beaches in Monterey County, and Watsonville and the Santa Cruz area in Santa Cruz County.

Nursing Course, U.C.L.A.

University of California Extension has added a course in Tuberculosis Nursing to its list of summer evening courses at its downtown Los Angeles center, 813 South Hill Street. Juanita Booth, assistant professor of Nursing at U.C.L.A., will instruct the class which will meet daily from 6.30 to 9.30 p.m. for 10 meetings July 19th through 30th. Registration is being accepted at the center.

"Cure-all" Ozone Machines Bring Sentences to Four

The manufacturer and three salesmen of a "cure-all" ozone machine received sentences May 26th ranging from three months to a year on a charge of conspiracy to violate the California Pure Drugs Act.

The men, who earlier pleaded guilty to the charge, sentenced by Alameda County Superior Judge James R. Agee, were:

Fred H. Stephens, Balboa, president of United Ozone, Inc.: Five years' probation, which includes serving one year in county jail; restitution of \$2,500 to Alameda County to cover cost of investigation; report to probation officer monthly and refrain from any activity associated with illness or diseases in humans.

J. H. Effenberg, Brea, same sentence as Stephens, except no restitution. George W. Kelm, Lodi: Six months in the county jail, sentence suspended during a three-year probationary period; restitution in the amount of \$2,500 to Alameda County; monthly reports to probation officer and refrain from any activity associated with illnesses or diseases in humans.

R. Walter Garratt, Oakland: Three months in the county jail and three months' probation.

Treatments from the ozone machine, according to a booklet submitted as evidence by inspectors of the Bureau of Food and Drugs, would cure cancer, heart diseases, high blood pressure, sinus infection, tumors, diabetes and ulcers.

Actually, according to Food and Drug laboratory experts, gases generated by the machine killed mice and could cause damage to the respiratory system of humans.

Medical authorities, including Dr. Ralph W. Weilerstein of the U. S. Food and Drug Administration, testified at a preliminary hearing that the machine was useless and, under certain circumstances, could prove dangerous to health. The machine in operation produces a mixture of ozone and oxides of nitrogen, which are harmful gases. In fact, it was pointed out, the gas is 100 times more toxic than carbon monoxide gas and 10 times more toxic than cyanide gas.

State Health Department investigators have been working on the case for

S. F. Home Accident Survey Under Way

One of the largest surveys ever conducted in the home accident field was begun in San Francisco June 1st and will continue through August. This survey was made possible by a grant to the State Department of Public Health from the W. K. Kellogg Foundation for a three-year project to facilitate exploration into the field of home accident prevention. (See *California's Health*, August 31, 1954.) Through this grant a home safety project was set up in the department. Since home accidents are the leading cause of death to California children from 1 to 14 years old, and one of the leading causes of death in all age groups in California, the need for such a project is patent.

The Home Safety Project staff chose San Francisco as a desirable area for one of the studies to be undertaken throughout the State to establish the epidemiology of home accidents—who suffers these accidents, when, where, and under what conditions.

Dr. Ellis Sox, San Francisco Director of Public Health, was eager to cooperate with the department in such a survey, and San Francisco's unique system of emergency hospitals presents an excellent opportunity for this purpose. These five hospitals are open on a 24-hour basis, to all citizens of San Francisco, without charge. In the average year nearly 50,000 persons receive treatment in these hospitals. Of these about half are home injury cases. These cases are considered to be fairly representative of the total home accidents occurring in the city.

several years, during which time four other salesmen were found guilty of falsely advertising the device.

The State Health Department warns all persons using such "cure-all" devices that serious damage or harm to their health could result from continued exposure to such machines.

As a safety precaution, persons owning or using the devices are urged to check them with their local health officer or private physician.

During the present survey the basic information about every home accident case coming into the hospital will be obtained by stewards, ambulance drivers and nurses at the hospitals. Detailed information will be obtained by interviews in the home of the injured person, usually two or three days after the accident. San Francisco Health Department staff will conduct these follow-up interviews. The information will be coded in the San Francisco Health Department, and placed on punch cards and tabulated.

An analysis of the data will be made, following established statistical procedures to insure that rules of reliability are given their due, and including solid grounding in home safety to insure that the focus stays on those aspects of the home accident problem which are amenable to preventive measures.

All these activities are but means to the establishment of a systematic program of home accident prevention in San Francisco. How much of this program will consist of educational measures, how much of environmental correction, how much of law enforcement, how much of other techniques, cannot be foretold. These decisions will be made on the basis of the survey findings and analysis and the program will be designed specifically for San Francisco.

The action program will be conducted by the personnel of the San Francisco Health Department, with the State Health Department's Home Safety Project staff continuing in the same consultative capacity in which it is now serving. The project staff members feel that the greatest contribution the State Health Department can make to home safety will be to help local communities help themselves in solving this vital public health problem.

Fluoridation at the Polls

In the June 8th California primaries two cities had fluoridation proposals on their ballots. San Diego, which has been fluoridating its public water supply since November, 1952, voted 49,000 to 44,000 to repeal the city ordinance which provides for this service. Watsonville voted 802 to 321 against fluoridation.

Domestic-wild Rodent Survey Finds Plague Fleas

Several pools of plague-positive fleas were found recently in an isolated ravine in the San Bruno Mountains along the northern limits of San Mateo County during a rodent-ecology study being conducted by the U. S. Public Health Service with the cooperation of the Bureau of Vector Control, State Department of Public Health.

The positive fleas were recovered from native wild mice in the course of studies to determine the interchange of fleas among domestic rats and wild rodents. The ravine adjoins two garbage-feeding hog ranches which were supporting a large population of domestic rats.

The first recovery of positive fleas was made in July of last year, followed in February of this year by an increasing rate of recoveries over a period of several weeks.

The rate of increase suggested that an epizootic was in progress among wild mice and, following a meeting with officials of the Public Health Service, local health departments and local state agricultural agencies, the Bureau of Vector Control began a survey of other representative areas in the San Bruno Mountains and the San Andreas Rift range to determine if the outbreak were localized or widespread.

Twenty-one nearby areas were selected for survey, resulting in the recovery of 1,271 fleas from animals and their nests. Division of Laboratory processing disclosed that only one of the approximately 200 pools of fleas collected in this survey proved positive for plague—and that pool contained only two fleas.

Because of the valuable information to be obtained in following the course of the epizootic discovered within the study area, and the negligible risk to the public if suitable control measures were taken in the surrounding area, all agencies involved agreed to leave the study area undisturbed.

Control measures were instituted outside the study area, especially in and around the two nearby hog ranches which were heavily infested with domestic rats. It was necessary

to undertake the emergency measures in order to prevent the epizootic spreading from the field mice to the rats outside the study area, with the possible exposure of man.

These control measures were carried out by the Bureau of Vector Control with cooperation of the County Agricultural Commissioner, the health officer of the City of Colma and the ranch owners.

Of interest was the fact that while the rodent-kill program in the areas surrounding the study ravine resulted in a reduction varying from 40 to 60 percent in the population of wild mice, the flea population per mouse showed a marked increase.

Resurveys by Vector Control will be conducted the last week in July and the first week in October to determine population indices of both rodents and their fleas as well as the presence or absence of plague.

Currently, recoveries of plague-positive fleas in the study area have become so few and isolated as to indicate this localized epizootic is burning itself out. Continued study of this situation may afford some answers as to what happens to plague after an epizootic. The Public Health Service will continue its investigations in this area.

Swimmers Urged to Heed Safety Rules

The State Department of Public Health has issued its annual warning to swimmers to heed the rules of common sense during their summer play at private and public pools and at natural bathing places. The Department's Bureau of Sanitary Engineering is working closely with local health departments on this problem.

As well, the operators of pools and bathing resorts were cautioned to maintain their premises and equipment in such a manner as to minimize the hazard of accidents. Lifeguards should be on duty at all times of public use.

The State Department of Public Health has supervision of the sanitation and safety of public swimming pools and bathing places. Regulations have been adopted covering artificial pools, but their enforcement is the responsibility of local health departments.

Health Officers Hold Semi-annual Meeting In Los Angeles

The California Conference of Local Health Officers held their spring semiannual meeting at Los Angeles, May 13th and 14th. All full-time health officers of the State belong to this organization, which was established in an advisory capacity to the State Department of Public Health by legislation eight years ago.

Dr. Malcolm H. Merrill, State Director of Public Health, opened the conference sessions with a short overview of public health in California in 1954 (see *California's Health*, May 31, 1954) and then turned the meeting over to Dr. James C. Malcolm, president of the conference and Health Officer of Alameda County.

The guest speaker of the conference was Dr. Wilson G. Smillie, professor of preventive medicine and public health of Cornell Medical School. His address dealt with changing concepts in public health in the United States and possible future trends. (A condensation of this address will soon appear in *California's Health*.)

The conference made decisions concerning a number of problems that had been under careful study by its various study committees since the fall plenary session of 1953. Among them were:

Approved in principle a statement on the cooperative relations between health departments, civil defense and the American Red Cross in time of natural disaster.

Made formal suggestions relative to the training policies and program of the State Department of Public Health. These were transmitted to the recently appointed Advisory Committee on Training at its first meeting.

Deferred definitive action on the means test in the hospitalization of tuberculous patients and urged further exploration of the subject with the California Tuberculosis and Health Association and the California Medical Association. The conference expressed the desire that these groups join with them in research on such social, economic and medical factors as may further the control of tuberculosis in California.

Referred to a study committee for further study the matter of the state

tuberculosis subsidy and the question of payment by patients.

Urged that a study be made of effective utilization of maternity beds in general hospitals, and indicated that the conference desired to participate in this study.

Took similar action in regard to a plan for evaluating the child health conference program in California. (See California's Health, June 15, 1954.)

Approved the priority list for health center construction as prepared by the Bureau of Hospitals of this department.

Approved the content of a sanitation guide for the operators of fairs, circuses and carnivals submitted by the department.

Resolved that the conference go on record as being in opposition to House Resolution 2341 which would make illegal the fluoridation of public water supplies, and to so inform our representatives on the Interstate and Foreign Commerce Committee of the House of Representatives, which is considering this bill.

An informational report was made to the conference on the poliomyelitis vaccine trials and on the present use of gamma globulin in poliomyelitis prevention.

The fall meeting of the conference will be held in October or November of this year at a time and place to be determined later by the Director of Public Health and the executive committee on the conference.

Public Health Positions

San Bernardino County

Public Health Nursing Supervisor: Salary range, \$360-\$438.

Staff Public Health Nurse: Two vacancies in county health department now exist—one in Colton and one in Barstow. Basic salary for staff public health nurses has been increased to a range of \$327-\$397. Mileage of 8 cents is allowed. For further information write Miss Clara Annabil, Di-

Review of Reported Communicable Diseases Morbidity—May, 1954

Diseases With Incidence Exceeding the Five-year Median

Diseases	May 1954	May 1953	May 1952	5- year median
Amebiasis	44	46	45	
Brucellosis	8	6	5	
Chickenpox	6,149	5,330	5,550	
Encephalitis	12	8	5	
Food poisoning	229	43	28	
Hepatitis, infectious	220	80	51	
Influenza	108	27	98	
Malaria	2	10	6	
Measles	12,038	12,787	9,986	
Pertussis	381	222	405	
Poliomyelitis	141	112	78	
Salmonella infections	61	44	44	
Shigella infections	43	93	70	
Streptococcal infections, respiratory, including scarlet fever	882	836	614	

Diseases Below the Five-year Median

Diseases	May 1954	May 1953	May 1952	5- year median
Coccidioidomycosis (disseminated)	6	9	8	
German measles	1,230	3,506	1,708	
Meningitis (meningococcic)	23	45	37	
Mumps	4,428	5,098	3,610	
Rabies, animal	5	12	29	
Tetanus	4	3	5	
Typhoid fever	5	8	3	

Venereal Diseases

Diseases	May 1954	May 1953	May 1952	5- year median
Syphilis	530	562	544	
Gonococcal infections	1,282	1,152	1,160	
Chancroid	13	14	15	
Granuloma inguinale	—	1	2	
Lymphogranuloma venereum	2	9	7	

¹ Median not calculated.

rector of Public Health Nursing, County Health Department, 340 Mt. View Avenue, San Bernardino.

City of Sacramento

Public Health Nurse: Starting salary \$290-\$310, depending upon experience. Increases to \$355. Car allowance. For further information write Visiting Nurse Association, 2531 P Street, Sacramento.

San Diego

Public Health Nurses: Three new public health nursing positions are being added effective July 1st, and six replacements are needed for resignations in July. The positions are all generalized public health nursing, including school health service. With 5 percent salary increase, effective July 1st, the salary range is now \$327-\$397 for Public Health Nurse II.

Inquiries should be directed to J. Askew, M.D., Director of Public Health, San Diego Department of Public Health Civic Center, San Diego 1.

San Joaquin County

Sanitarian: Two vacancies exist. Salary range \$320-\$395. Applicants must possess certificate as a Registered Sanitarian, California or be eligible to take the examination. Write to Director of Environmental Sanitation, San Joaquin Local Health District, 130 South American Street, Stockton.

Santa Barbara County

Public Health Analyst: Salary \$322-\$395. For further details write Joseph T. N. M.D., Health Officer, Santa Barbara County Health Department, Post Office Box 1, Santa Barbara.

